GRADIENT TERRACE DESIGN

Job Name _____ Job Class _____

Location _____
(SWCD) (near)

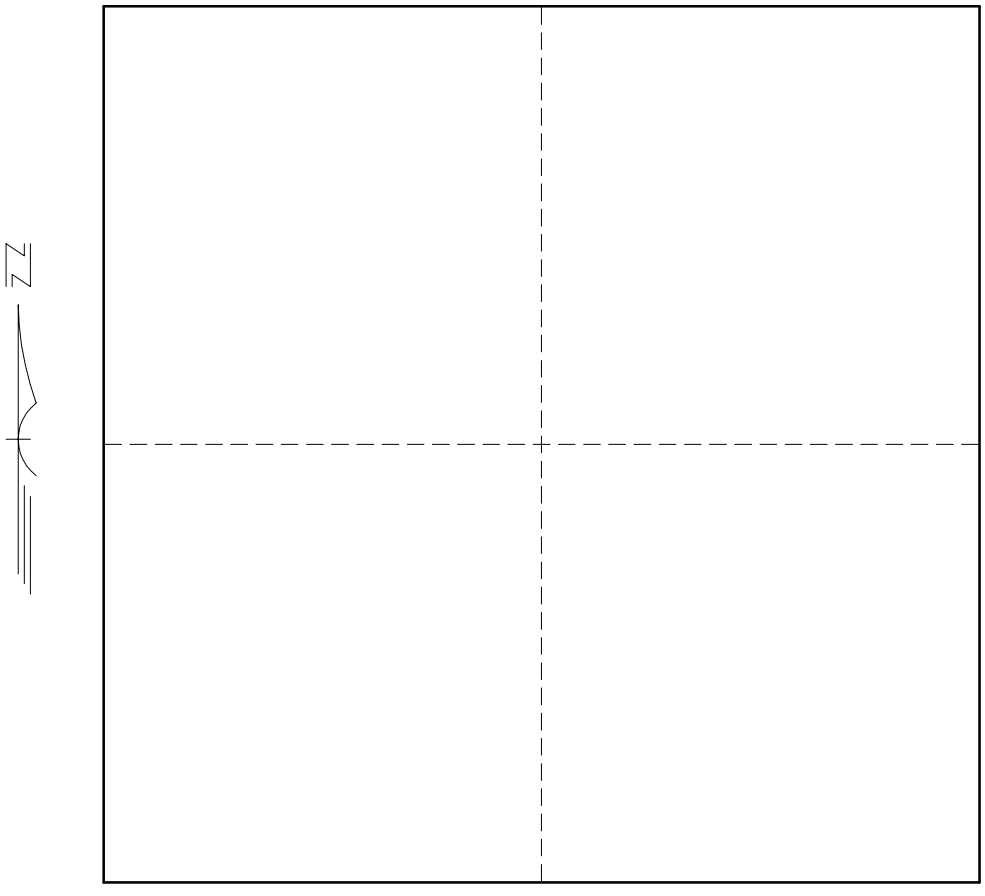
By _____ Date _____

Checked by _____

Gradient Terrace Design Procedure

1. Make trial terrace system layout keeping in mind terrace standard limitations.
2. Check trial layout with USLE to see that the predicted soil loss, A, is less than the allowable soil loss, T.
3. Adjust the trial layout and/or management practices as necessary.
4. Determine peak runoff for each terrace in the system.
5. Determine the configuration for each terrace in the system.

Terrace System Layout



Check Trial Layout With USLE

Soil Series _____ Allowable Soil Loss – T = _____ tons/acre/year

Soil Erodibility Factor – K = _____

Cropping Sequence _____

Management Practices _____

Cropping Management Factor – C = _____

Erosion Control Practice _____

Erosion Control Practice Factor – P = _____ Rainfall Factor – R = _____

	Ter. No. ____	Ter. No. ____	Ter. No. ____	Ter. No. ____	Ter. No. ____	Ter. No. ____
Field Slope %						
Slope Length (feet)						
LS Factor						
Predicted Soil Loss – A						

Where A = R K LS C P

Continue if A is less than T – If not, adjust layout and/or management practices as necessary.

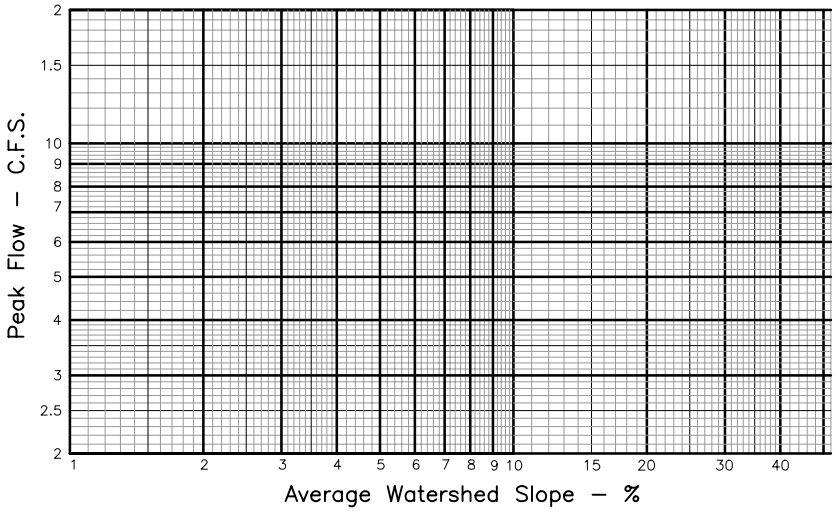
Determine Peak Runoff For Each Terrace

Design Frequency _____ years Hydrologic Soil Group _____

Runoff Curve Number _____ Storm Distribution Type _____

24–Hour Rainfall _____ inches

	Ter. No. ____	Ter. No. ____	Ter. No. ____	Ter. No. ____	Ter. No. ____	Ter. No. ____
Watershed Area (acres)						
Average Watershed Slope						
4% Slope, Q (cfs)						
16% Slope, Q (cfs)						



Peak Runoff (cfs)						

Determine The Configuration For Each Terrace

Terrace No. _____

Q = _____ cfs

s = _____ ft/ft

Terrace No. _____

Q = _____ cfs

s = _____ ft/ft

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s = _____ ft/ft

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